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(54) Title: APPARATUS FOR AND METHOD OF STEREOTOXIC SURGERY

(57) Abstract

A method and an apparatus are set forth for selectively irradiating a target (18) within a patient (14). A 3-dimensional mapping is provided of a mapping region (16) surrounding the target. A beaming apparatus (20) emits a collimated beam. Diagnostic beams (26, 28) at a known non-zero angle to one another pass through the mapping region. They produce images of projections within the mapping region. Electronic representations of the images are compared with the reference data thereby locating the target (18). The relative positions of the beaming apparatus and the living organism are adjusted in such a manner that the collimated beam is focused on the target region. The comparison is repeated at small time intervals and, when the comparison so indicates, the adjusting step is repeated, as needed, and in such a manner that the collimated beam remains focused onto the target region (16).

